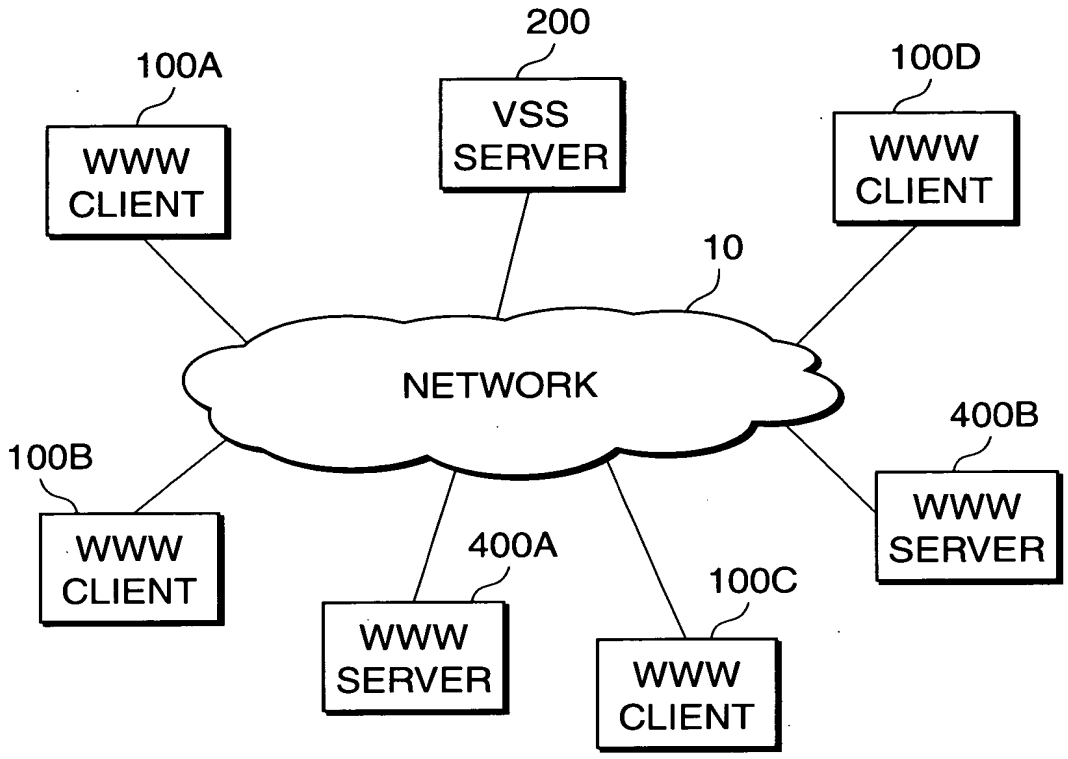
FIG.1



NETWORK SYSTEM 1

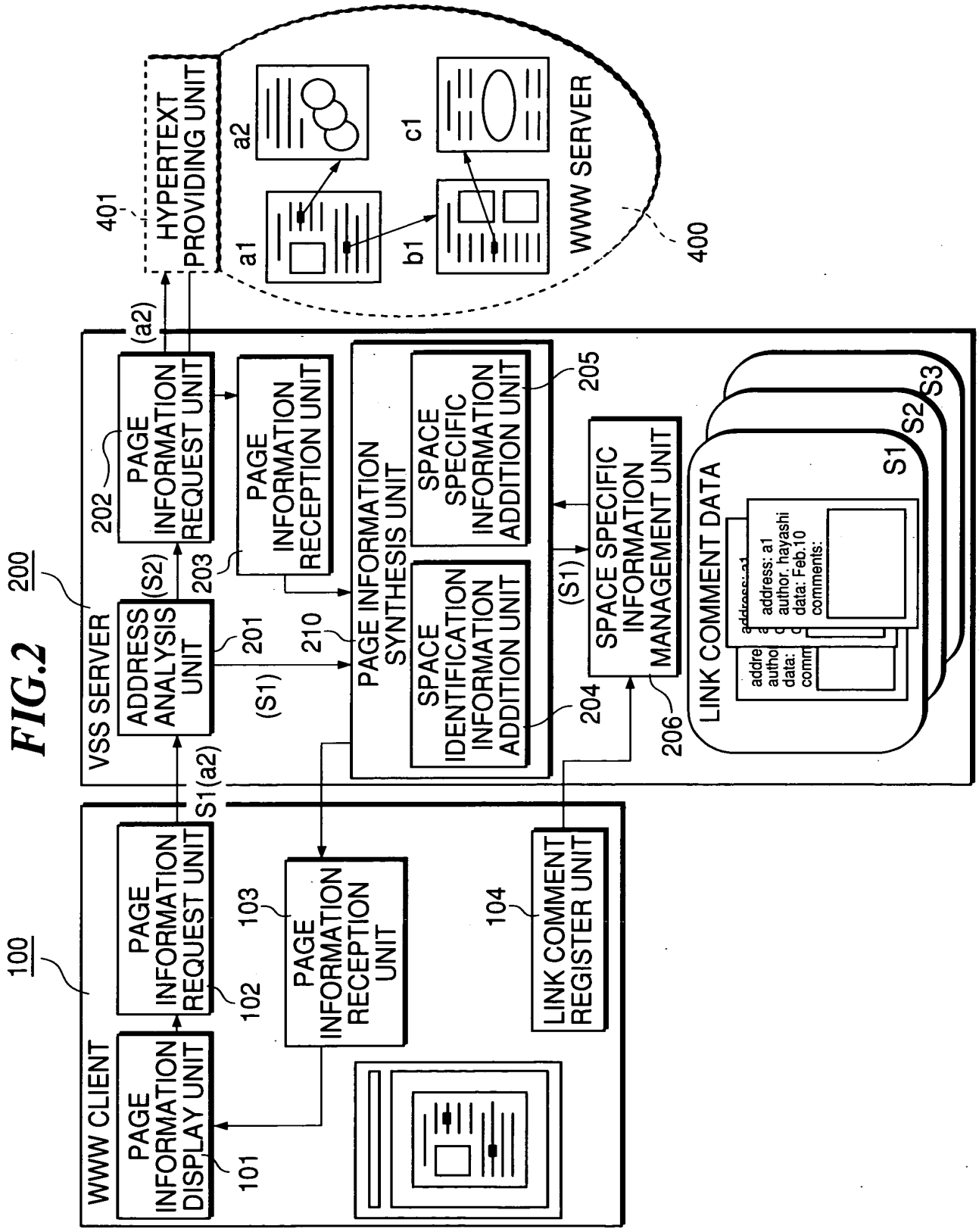

WWW CLIENT
PAGE INFORMATION DISPLAY UNIT
PAGE INFORMATION REQUEST UNIT
PAGE INFORMATION RECEPTION UNIT
LINK COMMENT REGISTER UNIT
VSS SERVER
ADDRESS ANALYSIS UNIT
PAGE INFORMATION REQUEST UNIT
PAGE INFORMATION RECEPTION UNIT
PAGE INFORMATION SYNTHESIS UNIT
SPACE SPECIFIC INFORMATION ADDITION UNIT
SPACE IDENTIFICATION INFORMATION ADDITION UNIT
SPACE SPECIFIC INFORMATION MANAGEMENT UNIT
LINK COMMENT DATA
address: a1
author, hayashi
data: Feb.10
comments:
HYPERTEXT PROVIDING UNIT
WWW SERVER
a1
a2
b1
c1
100
101
102
103
104
200
201
202
203
204
205
206
210
400
401
S1
S2
S3
(S1)
(S2)
S1(a2)
(a2)

FIG.2

FIG.3A

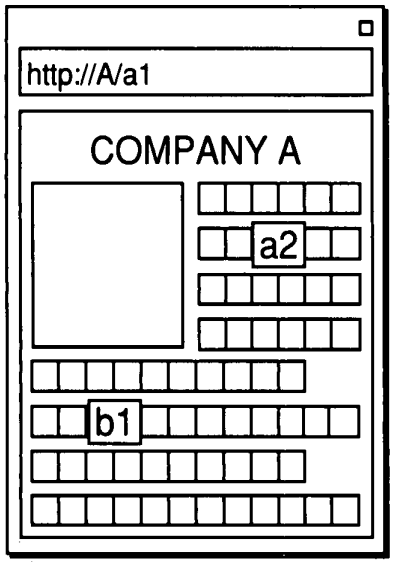


FIG.3B

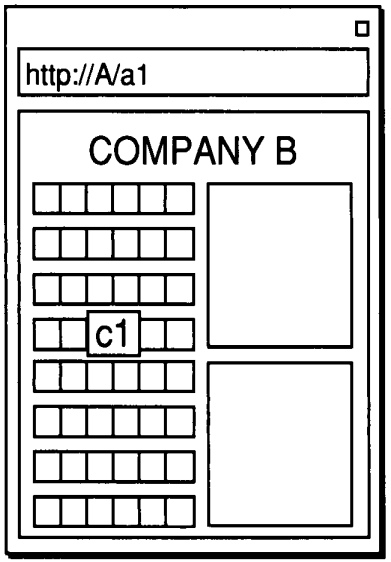


FIG.3C

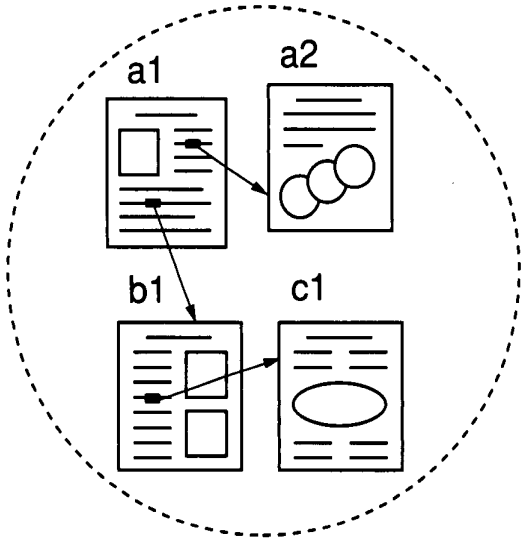


FIG.3D

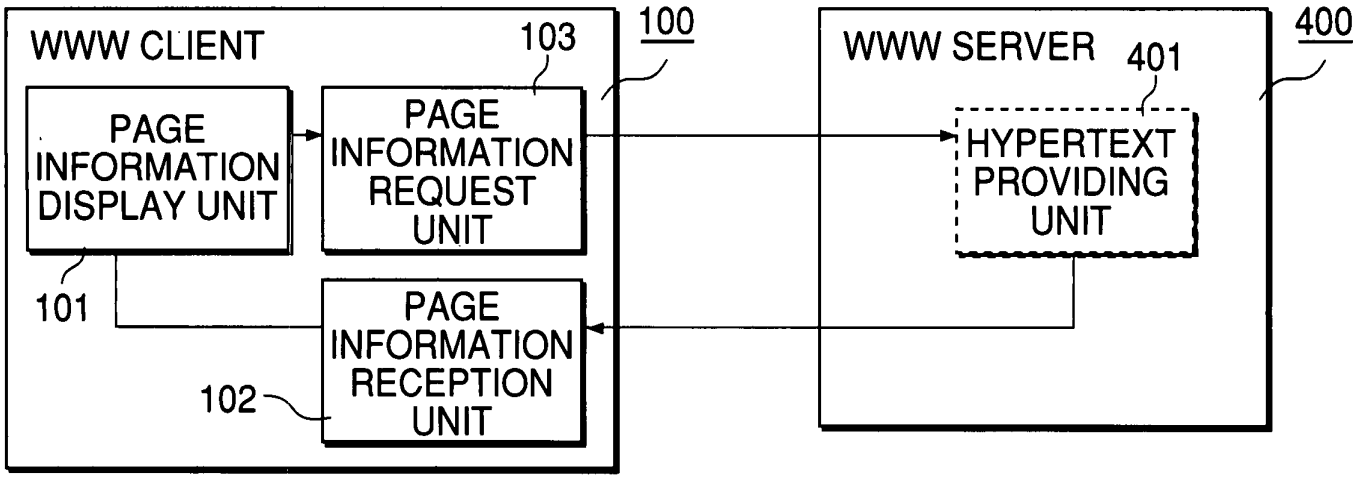


FIG.4A

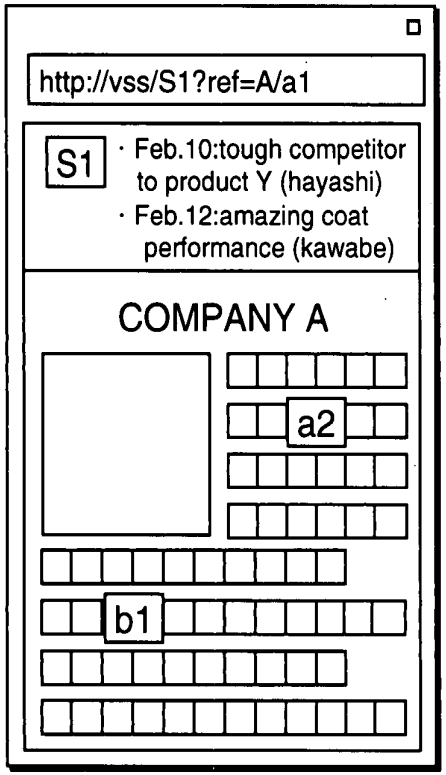


FIG.4B

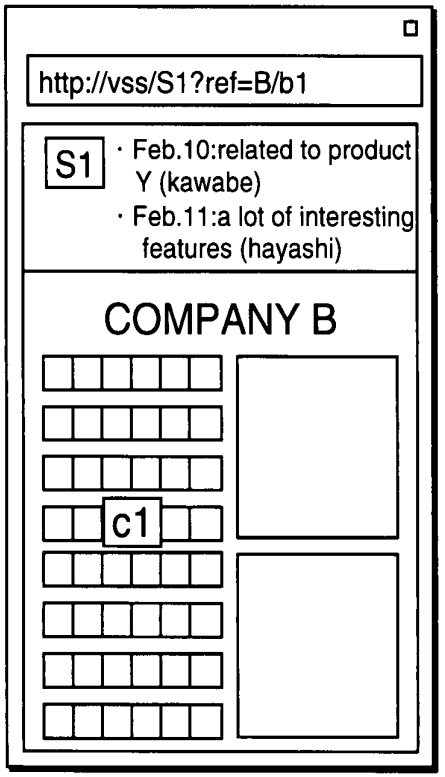


FIG.4C

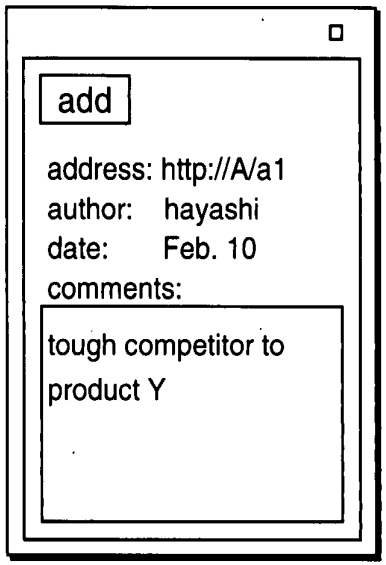


FIG.5

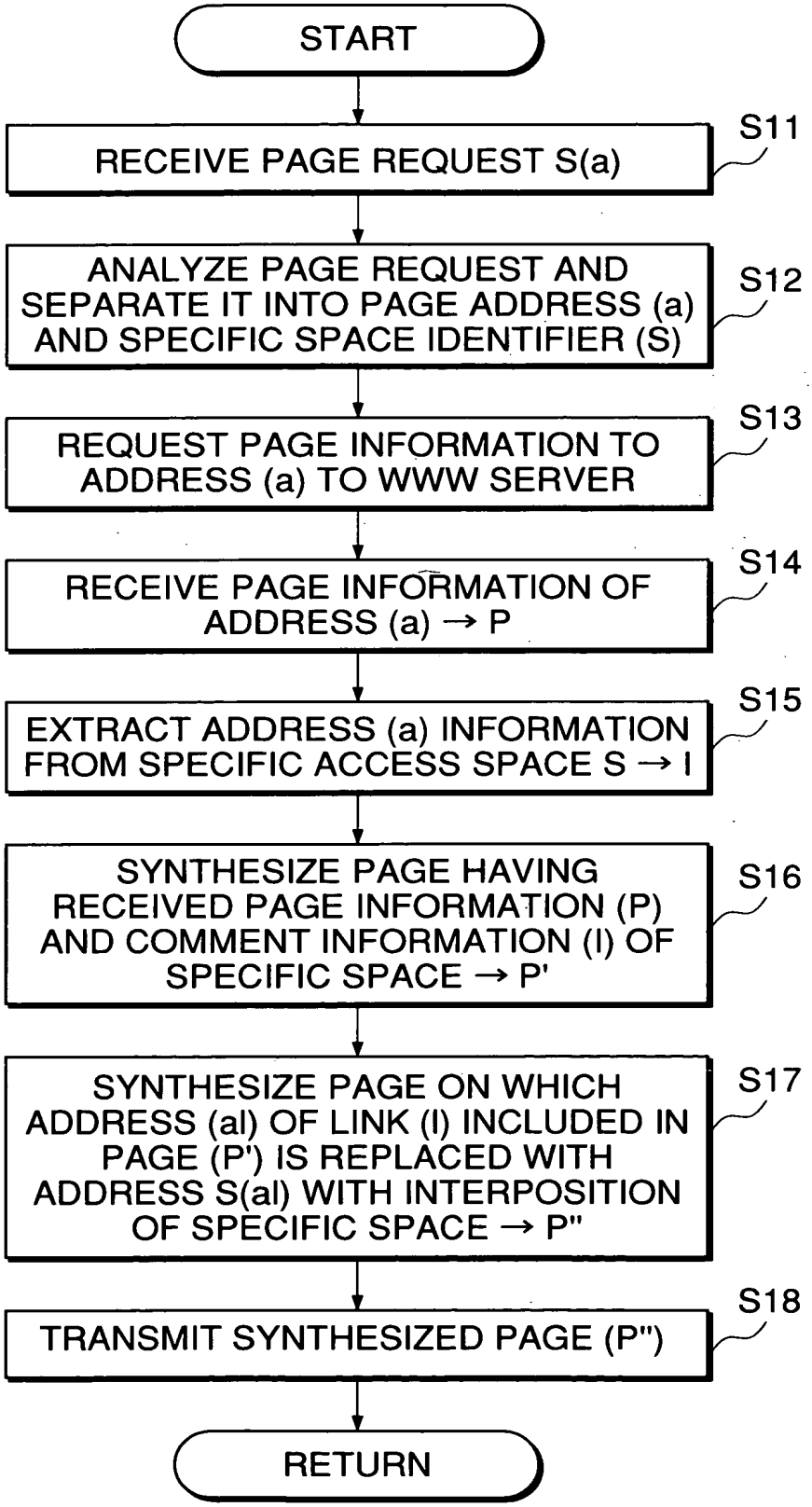

START
RECEIVE PAGE REQUEST S(a)
S11
ANALYZE PAGE REQUEST AND SEPARATE IT INTO PAGE ADDRESS (a) AND SPECIFIC SPACE IDENTIFIER (S)
S12
REQUEST PAGE INFORMATION TO ADDRESS (a) TO WWW SERVER
S13
RECEIVE PAGE INFORMATION OF ADDRESS (a) → P
S14
EXTRACT ADDRESS (a) INFORMATION FROM SPECIFIC ACCESS SPACE S → I
S15
SYNTHESIZE PAGE HAVING RECEIVED PAGE INFORMATION (P) AND COMMENT INFORMATION (I) OF SPECIFIC SPACE → P'
S16
SYNTHESIZE PAGE ON WHICH ADDRESS (al) OF LINK (I) INCLUDED IN PAGE (P') IS REPLACED WITH ADDRESS S(al) WITH INTERPOSITION OF SPECIFIC SPACE → P"
S17
TRANSMIT SYNTHESIZED PAGE (P")
S18
RETURN

FIG.6

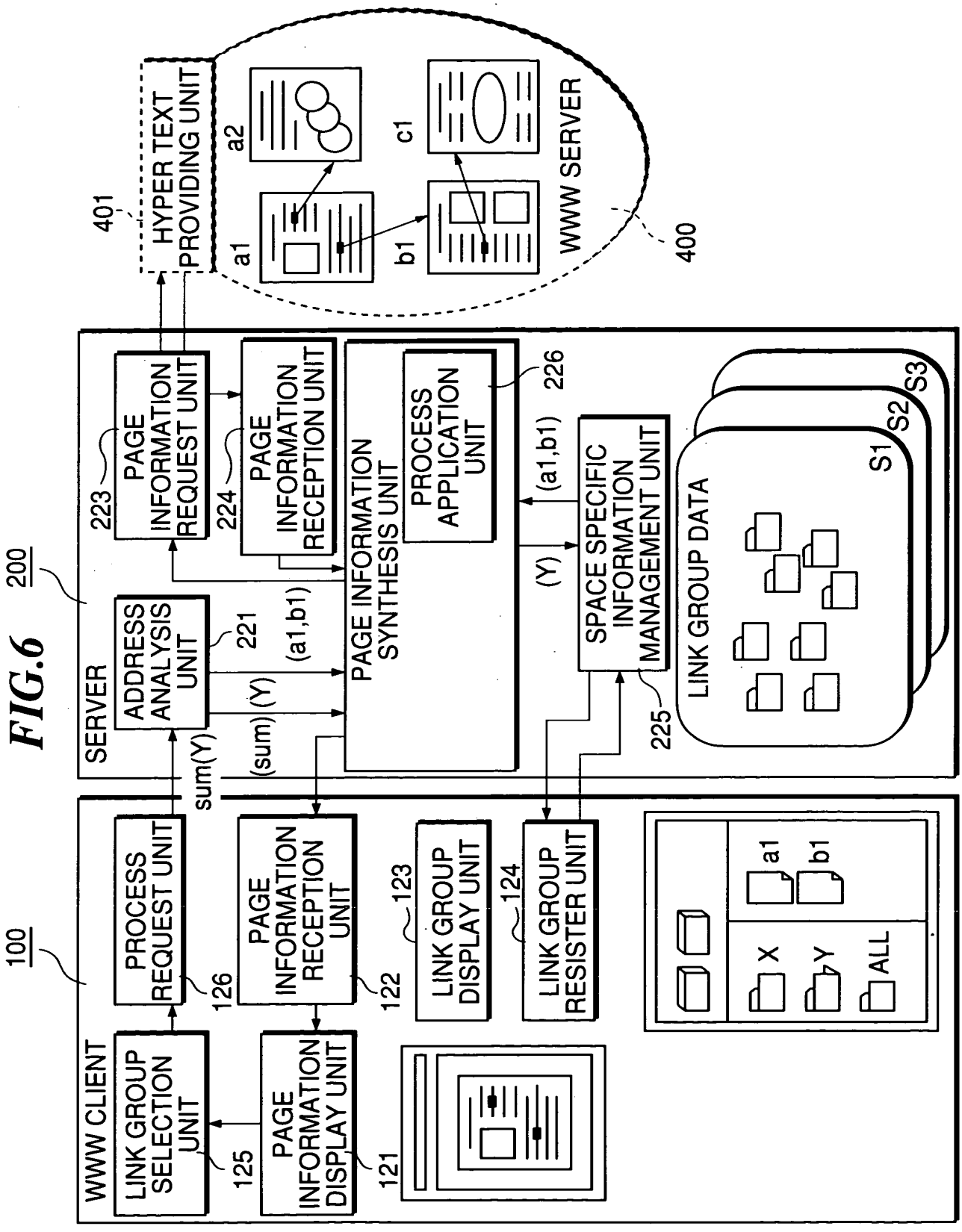

WWW SERVER
400
HYPER TEXT PROVIDING UNIT
401
a1
a2
b1
c1
SERVER
200
PAGE INFORMATION REQUEST UNIT
223
PAGE INFORMATION RECEPTION UNIT
224
PAGE INFORMATION SYNTHESIS UNIT
PROCESS APPLICATION UNIT
226
ADDRESS ANALYSIS UNIT
221
(a1,b1)
(Y)
(sum)
sum(Y)
SPACE SPECIFIC INFORMATION MANAGEMENT UNIT
225
LINK GROUP DATA
S1
S2
S3
100
WWW CLIENT
PROCESS REQUEST UNIT
126
PAGE INFORMATION RECEPTION UNIT
122
LINK GROUP DISPLAY UNIT
123
LINK GROUP RESISTER UNIT
124
LINK GROUP SELECTION UNIT
125
PAGE INFORMATION DISPLAY UNIT
121
a1
b1
X
Y
ALL

FIG.7A

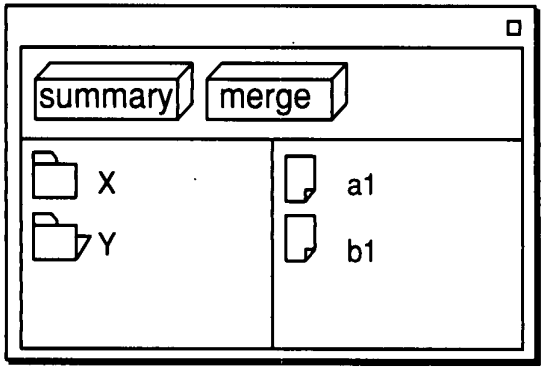


FIG.7B

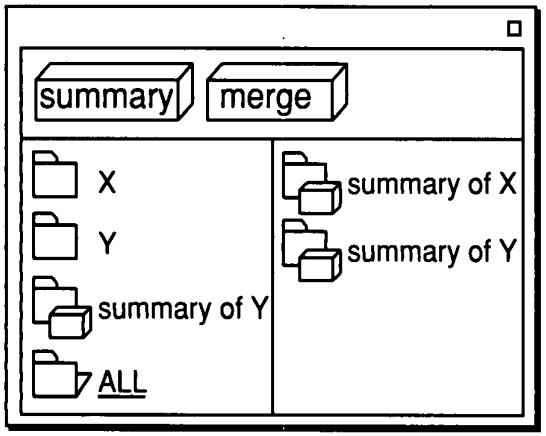


FIG.7C

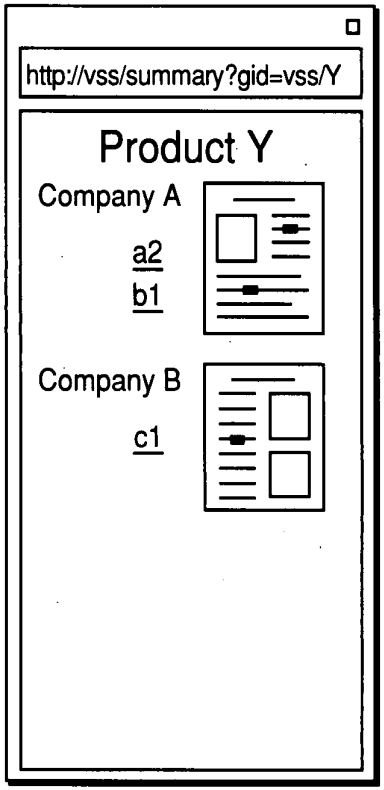


FIG.7D

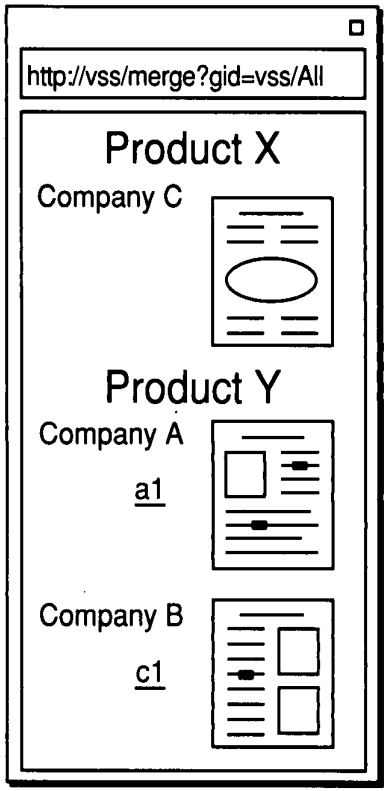


FIG.8

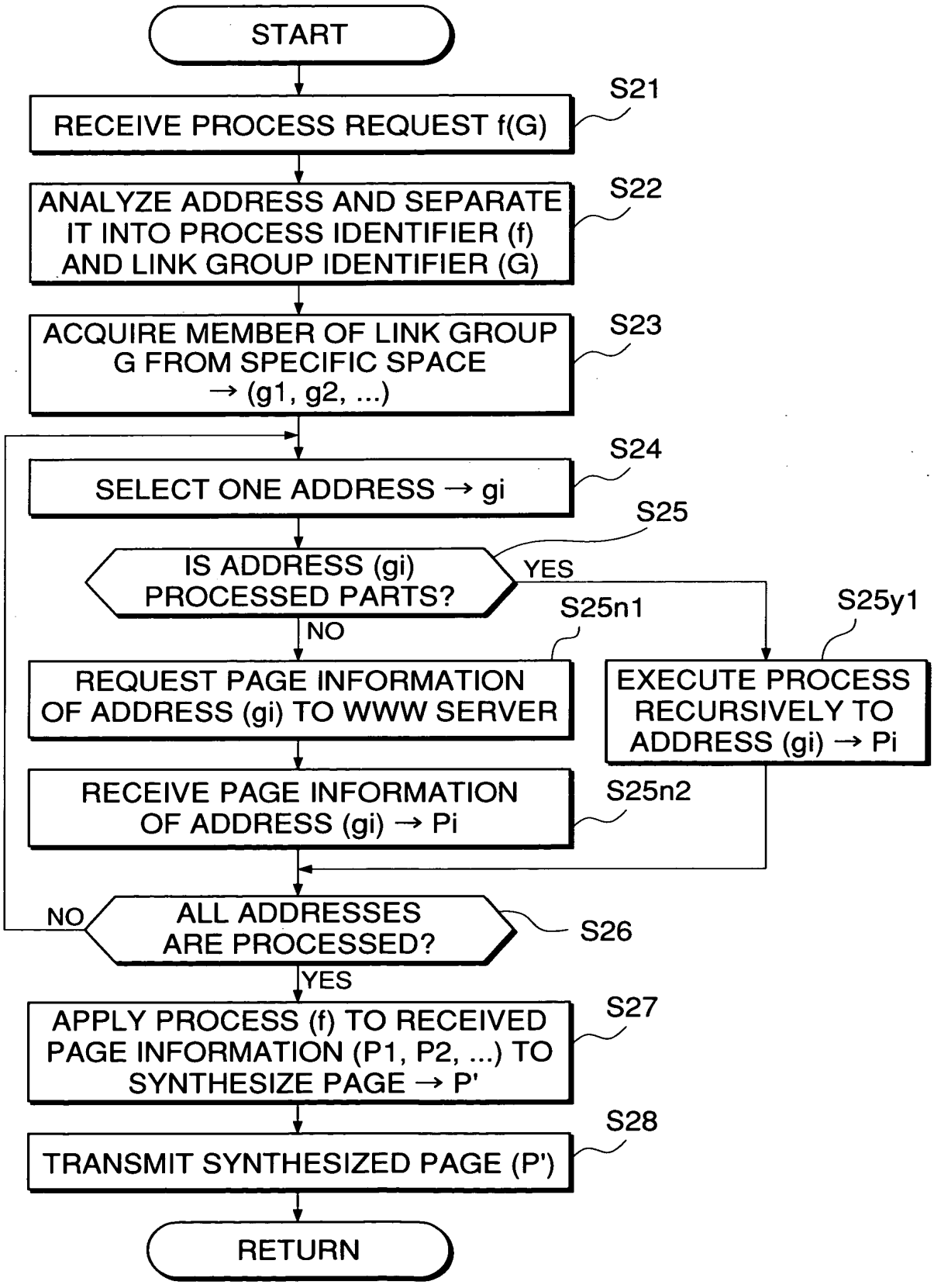

START
RECEIVE PROCESS REQUEST f(G)
S21
ANALYZE ADDRESS AND SEPARATE IT INTO PROCESS IDENTIFIER (f) AND LINK GROUP IDENTIFIER (G)
S22
ACQUIRE MEMBER OF LINK GROUP G FROM SPECIFIC SPACE → (g1, g2, ...)
S23
SELECT ONE ADDRESS → gi
S24
IS ADDRESS (gi) PROCESSED PARTS?
S25
YES
NO
S25n1
REQUEST PAGE INFORMATION OF ADDRESS (gi) TO WWW SERVER
RECEIVE PAGE INFORMATION OF ADDRESS (gi) → Pi
S25n2
S25y1
EXECUTE PROCESS RECURSIVELY TO ADDRESS (gi) → Pi
NO
ALL ADDRESSES ARE PROCESSED?
S26
YES
APPLY PROCESS (f) TO RECEIVED PAGE INFORMATION (P1, P2, ...) TO SYNTHESIZE PAGE → P'
S27
TRANSMIT SYNTHESIZED PAGE (P')
S28
RETURN

FIG.9A

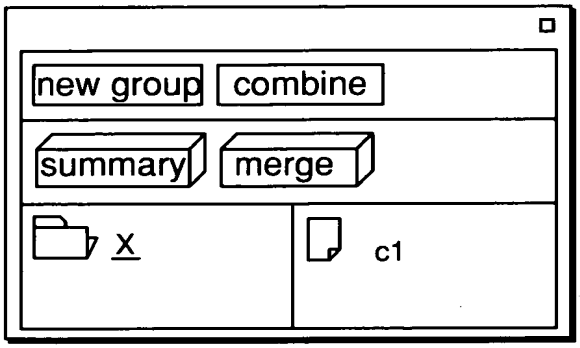


FIG.9B

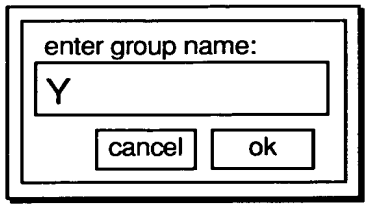


FIG.9C

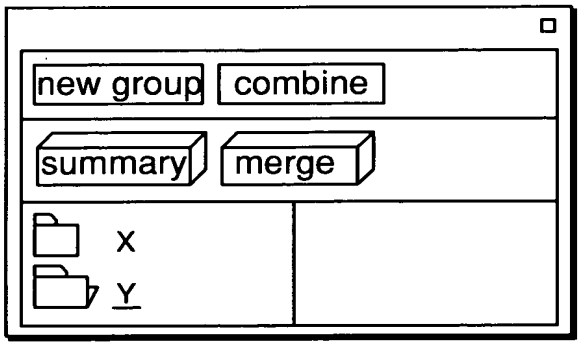


FIG.9D

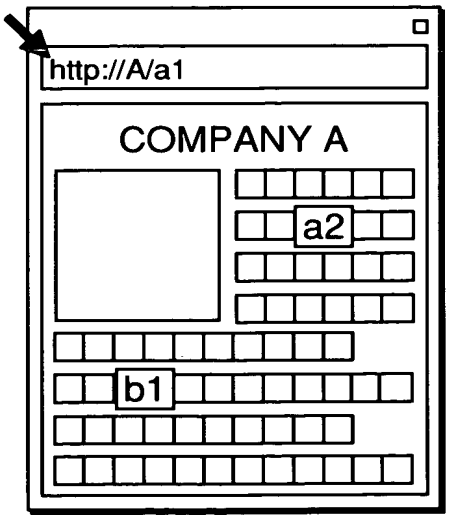


FIG.9E

FIG.9F

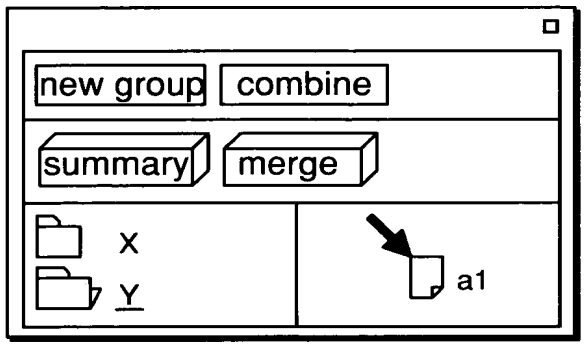


FIG.9G

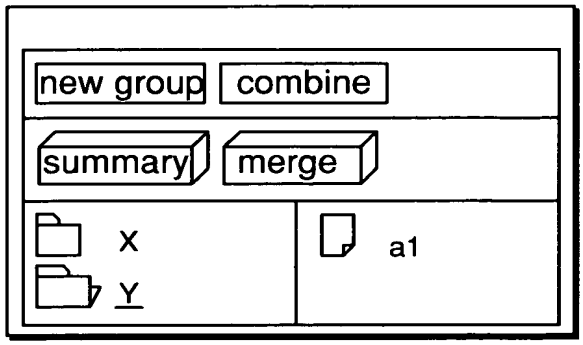


FIG.10A

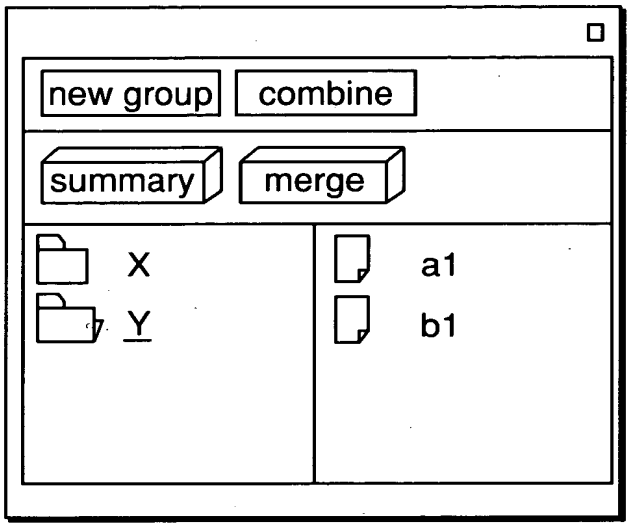


FIG.10B

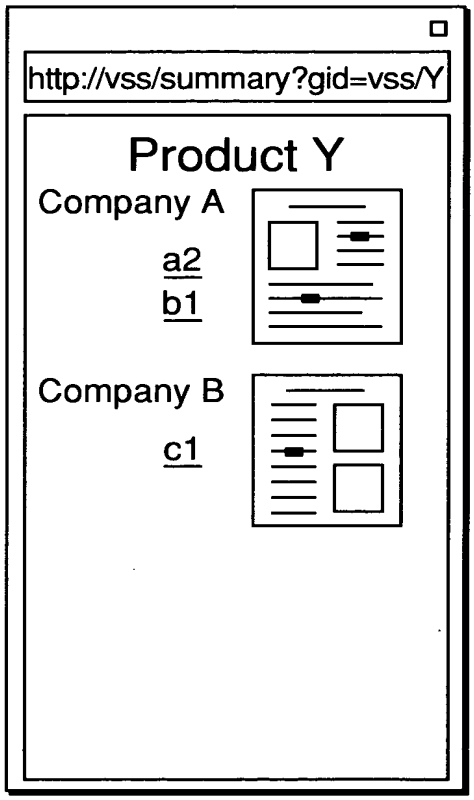


FIG.11A

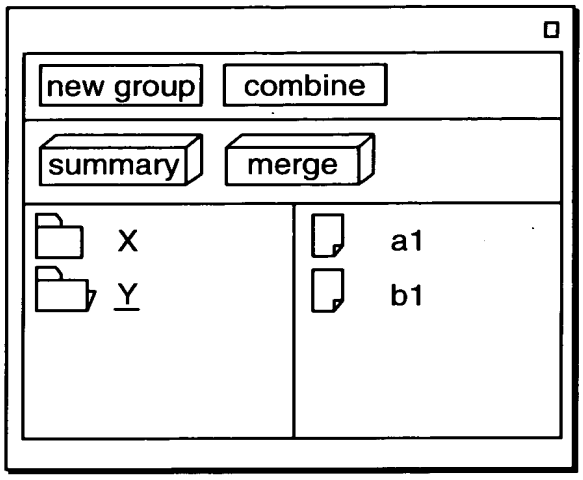


FIG.11B

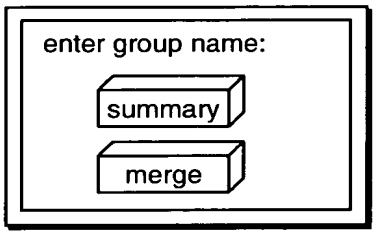


FIG.11C

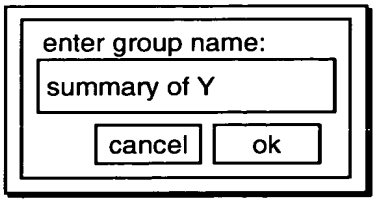


FIG.11D

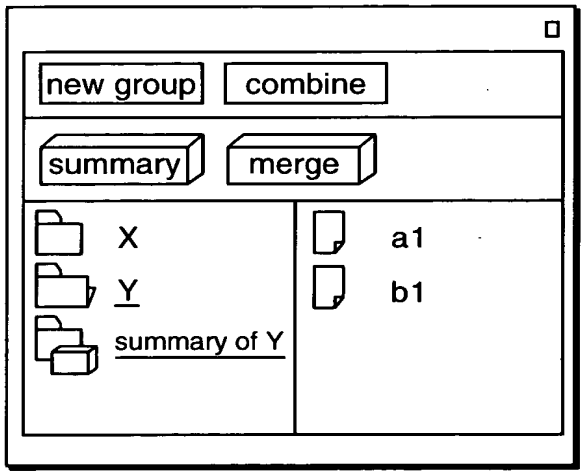


FIG.12A

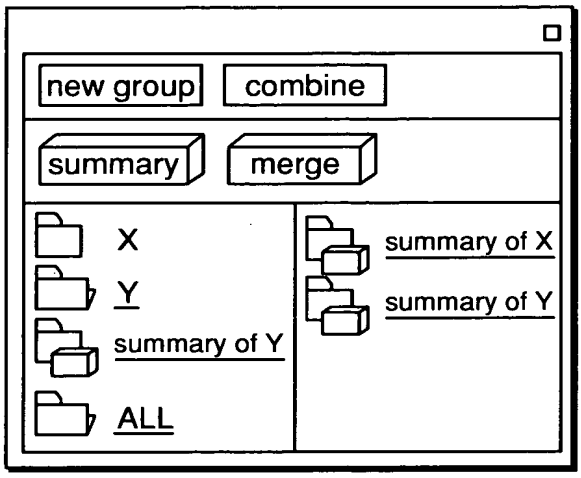


FIG.12B

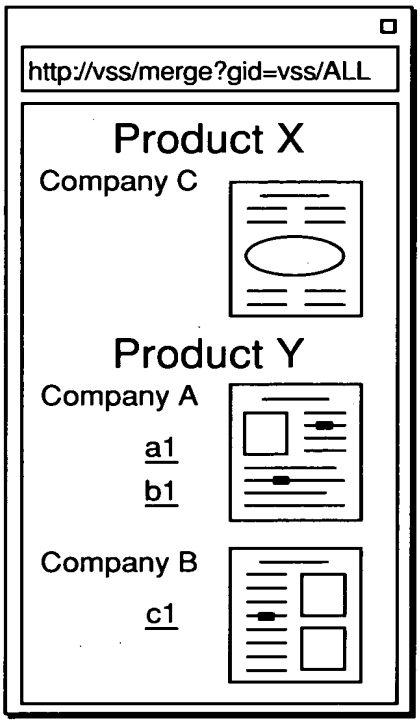


FIG.13A

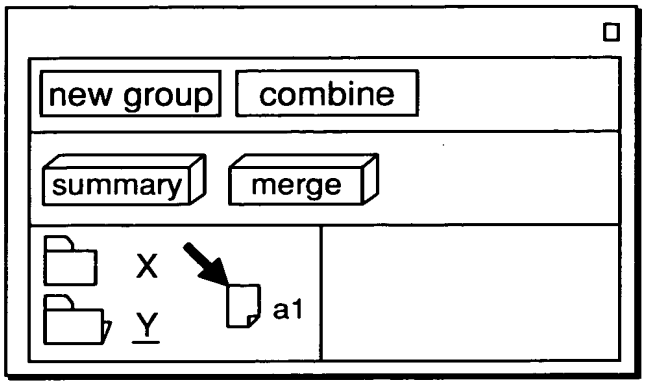


FIG.13B

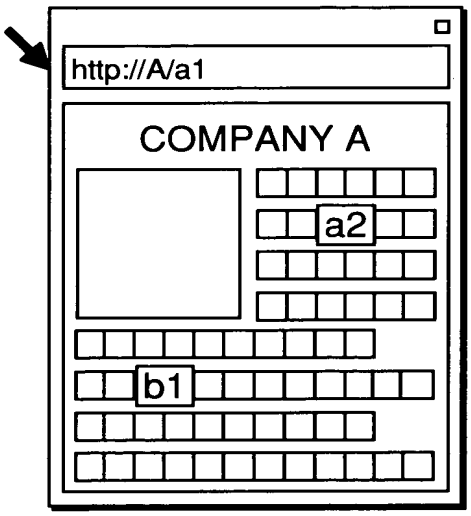


FIG.13C

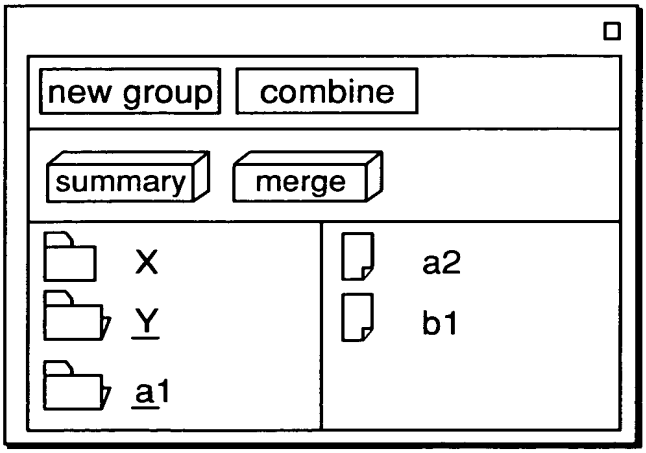



FIG.13D